## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JUNE 23, 1995

Honorable Thomas J. Downey Downey Chandler, Inc. Suite 1210 1401 Eye Street N.W. Washington D.C. 20005

Dear Mr. Downey:

The U.S. Environmental Protection Agency (EPA) appreciated the meeting with representatives of Phibrotech on February 28, 1995. Representatives from the Office of Solid Waste (OSW) and EPA Region V met with Phibrotech in a follow-up meeting on March 30 and through a conference call on April 3. In these meetings, you and others representing Phibrotech outlined several regulatory concerns about a recent determination by the State of Indiana for copper salt production at Heritage Environmental Services, Inc. of Indianapolis Indiana. Since that time, Phibrotech has raised a question of consistent state administration of hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA). Specifically, in this context, Phibrotech has asked whether or not liquid ion exchange technology (LIX) is considered under RCRA to be a reclamation process. The company is concerned that LIX is not being considered a reclamation process by competitor recyclers and that as a result the company's competitors are receiving spent copper etchants without a manifest. Please note that the Agency has not looked at particular processes at specific facilities and is not making any regulatory determinations for specific facilities in this letter. The purpose of this letter is to provide you an update on the Agency's efforts taken to address Phibrotech's concerns and update on how EPA is planning to amend the regulatory definition of solid waste.

## Spent Copper Etchant Reclamation In Indiana, Heritage Environmental Services

As discussed in the prior meetings, the State of Indiana is solely authorized to administer the relevant regulatory provisions of the RCRA. The Region believes, however, that several items merit further consideration by the U.S. EPA and the State. In particular, the Region is concerned about the application of regulations governing recycled materials and the jurisdictional scope of the regulatory requirements. However, the State operates the base RCRA program in Indiana and we intend to work out a joint position with the State. We expect the State will take any further action if appropriate. The Region had planned to meet with the State of Indiana in late June to discuss and evaluate these issues.

Liquid ion exchange technology (LIX) has been used historically to treat dilute metal-contaminated wastewaters prior to discharge. The technology functions by filling containers with plastic resin beads each containing hydrogen ions. When metal-bearing liquids are passed in through the containers, the metal ions in the liquid are exchanged on the resin beads for the hydrogen ions which go into solution.

The treated liquid may then be either discharged or reused for rinse water. Although LIX has historically been used for conventional wastewater treatment, it has also been used as a means of metal recovery. Metal recyclers will take spent ion exchange containers and strip the metals from the resins using an acid or base stripping solution. Typically, the metals are completely reclaimed through electrowinning.

When LIX is used in this way, it is defined as a reclamation process under RCRA. See 40 CFR 261. 1(c)(4) which states "A material is 'reclaimed' if it is processed to recover a usable product or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvent." Because LIX simultaneously regenerates liquid (for reuse as a process water, etchant, or solvent) and recovers metal, it meets the federal definition of a reclamation process.

Under federal regulations, listed sludges, listed by-products or spent materials which exhibit a hazardous characteristic being reclaimed through a LIX system would be solid and hazardous wastes. 40 CFR 261.2(c)(3). Please note that EPA is not making a regulatory determination for any specific facility using a LIX system. This kind of determination is properly made through the appropriate State regulatory authority when the State is authorized for the base RCRA program. A facility-specific determination is usually made the EPA Region in which the facility is located when the State is not authorized for the base RCRA program.

## Efforts to Modify The Definition of Solid Waste

As you are probably aware, the definition of solid waste which establishes RCRA jurisdiction over certain hazardous wastes being recycled, is currently being reevaluated within EPA and the States. The Agency expects to publish a proposed rule in the Federal Register during the fall of 1996. Working closely with State governments in the development of this proposed rule provides the Agency with an opportunity to address many of the issues of consistency and uniformity of RCRA administration among States and EPA Regions which you have raised. More specifically, issues of what constitutes legitimate recycling and establishing clear and simpler standards for RCRA jurisdiction are among the top goals of this process. We continue to solicit your input and concerns on these issues.

## Conclusion

EPA is committed to supporting, to the extent possible, consistent application of RCRA regulation through the state authorization process. Section 3009 of RCRA prohibits State governments or political subdivisions from imposing State regulations which are less stringent than the federal regulations on the same subject matter. EPA is available to the States for technical and regulatory assistance as needed. We thank you for the opportunity to discuss your concerns with us. If we can be of any further assistance, please do not hesitate to contact Mr. Paul Borst of my staff at (202) 260-6713.

Sincerely,

Michael Shapiro, Director Office of Solid Waste

CC: Waste Management Division Directors, Regions I-X